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Siemens Corporation  
Intellectual Property Department  
186 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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CALDWELL, ANDREW T

ART UNIT	PAPER NUMBER
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2142

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01/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/966,738

Applicant(s)

SOEMO ET AL.

Examiner

Andrew Caldwell

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-39 and 47-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-39 and 47-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20061019.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

Art Unit: 2142

**Specification**

The specification is objected to under 37 CFR 1.52(a)(1)(v) because, at pages 8-9, the text labeling the columns of the table is shaded. Such text is not easily subject to optical character recognition as per the rule.

**Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-13, 15-39, and 47-53 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for using the protocol in a LonTalk® environment, does not reasonably provide enablement for implementing the invention using another building automation and control network, such as a BACnet environment.

The amount of direction provided by the Applicants as to how implement their invention using a protocol other than LonTalk® is negligible. On page 8 lines 11-16 of the specification, the Applicants describe how their proprietary protocol is embedded in the explicit messages fields of LonTalk® messages. The Examiner fails to see where in the specification the Applicants have described how to implement their invention using any protocol other than LonTalk®.

1 As to the existence of a working example, the Applicants have provided no  
2 working example other than in the context of a LonTalk® environment. Although the  
3 Applicants have raised BACnet as an alternative building automation and control  
4 network (p. 2 lines 12-16), the remainder of the specification does not provide working  
5 examples using protocols other than LonTalk®.

6 As to the state of the prior art, two references, although they are not prior art, are  
7 particularly relevant. Swan describes how LonTalk®'s standard network variable types  
8 are "quite unlike" BACnet objects (p. 1). Swan describes how the means and messages  
9 by which LonTalk® standard network variable types are read and written are "quite  
10 unlike" BACnet services (p. 1). The BACnet FAQ describes how the BACnet and  
11 Echelon (i.e., LonTalk®) language are fundamentally different and devices using one of  
12 the languages can never interoperate directly with devices using the other (p. 3 "You  
13 mentioned that BACnet can use LonTalk®"). No evidence suggests that these  
14 fundamental differences between the two protocols have not always existed. It is  
15 therefore reasonable to infer that the state of the art at the time Swan and the BACnet  
16 FAQ were written existed at the time the invention was made. The state of the prior art  
17 would therefore suggest was such that a person of ordinary skill in the art would have  
18 been unable to make and use the claimed invention using any building automation and  
19 control protocol other than LonTalk®.

20 As to the breadth of the claims, they are written using generic terminology and  
21 are not limited to the LonTalk® protocol.

As to the level of predictability in the art, it would suggest that the claimed invention is enabled since this art is predictable.

In the response filed on 10/27/06, the applicants assert that incorporation of the present invention in a predictable data transmission protocol would be within the skill of one of ordinary skill in the art. If this statement is to be considered evidence, it has been considered but is given little weight. Attorney argument cannot take the place of evidence. See MPEP 2145.

The first four factors listed above weigh against a conclusion that the claimed invention is enabled throughout its entire scope. The fifth factor would weigh in favor of a conclusion that the claimed invention is enabled throughout its entire scope. The final factor is not probative since it is not evidence. 333After weighing the evidence, the Examiner concludes that the state of the prior art is particularly important. When a reference describes how fundamental differences exist between the two networks disclosed in the specification as possible embodiments of the "generic" protocol of the claims, the Examiner fails to see how the entire scope of the claim is enabled.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 2142

1 only if the international application designated the United States and was published under Article 21(2)  
2 of such treaty in the English language.  
3

4 Claims 1-5,8,10-13,15-16, 18-22, 25, 27-34, 36-39, and 47-51 are rejected under  
5 35 U.S.C. 102(e) as being anticipated by Hite et al., U.S. Patent No. 6,763,040.

6 Regarding claims 1 and 47, they are rejected for the reasons given in the final Office  
7 action mailed on August 9, 2005. Regarding claims 1-5,8,10-13,15-16, 18-22, 25, 27-  
8 34, 36-39, and 47-53, they are rejected for the reasons given in the non-final Office  
9 action mailed on January 14, 2005. Regarding claims 48-51, the limitations introduced  
10 in these dependent claims are identical to those introduced in dependent claims 2-5.  
11 Since the reasons for rejection given for claims 2-5 apply equally to claims 48-51, those  
12 reasons will not be repeated.  
13

14 ***Claim Rejections - 35 USC § 103***

15 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
16 obviousness rejections set forth in this Office action:

17 (a) A patent may not be obtained though the invention is not identically disclosed or described as set  
18 forth in section 102 of this title, if the differences between the subject matter sought to be patented and  
19 the prior art are such that the subject matter as a whole would have been obvious at the time the  
20 invention was made to a person having ordinary skill in the art to which said subject matter pertains.  
21 Patentability shall not be negated by the manner in which the invention was made.  
22

23 This application currently names joint inventors. In considering patentability of  
24 the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of  
25 the various claims was commonly owned at the time any inventions covered therein  
26 were made absent any evidence to the contrary. Applicant is advised of the obligation  
27 under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was  
28 not commonly owned at the time a later invention was made in order for the examiner to

1 consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)  
2 prior art under 35 U.S.C. 103(a).

3  
4 Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
5 Hite for the reasons given in the non-final Office action mailed on January 14, 2005.

6  
7 Claims 6-7 and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable  
8 over Hite in view of Nason et al., U.S. Patent App. Pub. 2002/0174240. As to claims 6-  
9 7, they are rejected for the reasons given in the non-final Office action mailed on  
10 January 14, 2005. Regarding claims 52-53, the limitations introduced in these  
11 dependent claims are identical to those introduced in dependent claims 6-7. Since the  
12 reasons for rejection given for claims 6-7 apply equally to claims 52-53, those reasons  
13 will not be repeated.

14  
15 Claims 23-24, 26, and 35 are rejected under 35 U.S.C. 103(a) as being  
16 unpatentable over Hite in view of Albert et al., U.S. Patent No. 6,775,692, for the  
17 reasons given in the non-final Office action mailed on January 14, 2005.

18  
19 Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes  
20 et al., U.S. Patent No. 6,073,110, in view of Hite et al., U.S. Patent No. 6,763,040, and  
21 the Admitted Prior Art.

22

1           Regarding claim 1, the preamble has been given patentable weight since the  
2 claim body refers back to the preamble. See "the application controller and "the  
3 applications" at lines 5-6. Rhodes teaches the invention substantially as claimed by  
4 disclosing a communication protocol for use in a system controller that includes an  
5 application controller (Fig. 1 elem. 20 control node) and a plurality of applications (Fig. 1  
6 elems. 14 including applications 30) for controlling a plurality of device controllers (Fig. 2  
7 elems. 24) on a control network (Fig. 1 elem. 22) using data relating to system points  
8 (Fig. 2 Zone data) that correspond to data variables in a data network. Rhodes teaches  
9 a plurality of predefined messages transmitted between the application controller and  
10 the applications for instructing the application controller to perform a function relating to  
11 a select system point and for reporting to the applications in response to said instruction  
12 (col. 5 lines 29-51).

13           Rhodes does not teach a protocol wherein said communications protocol is a  
14 proprietary protocol; said plurality of messages include a discover message transmitted  
15 from the application to the application controller to determine whether the select system  
16 point is stored in a database of the application controller; a message identification field  
17 for identifying a select message from said plurality of messages; and a protocol  
18 identification field for identifying said select message as being transmitted via said  
19 proprietary protocol.

20           As to the limitation of a proprietary protocol, Hite teaches a proprietary protocol  
21 per the admission in the first complete paragraph on page 6 of the defective Appeal  
22 Brief filed on January 12, 2006. It would have been obvious to one of ordinary skill in

1 the art at the time the invention was made to modify Rhodes, which is silent as to  
2 whether the protocol being used is proprietary or not, to use a proprietary protocol as  
3 taught by Hite. The Applicants' specification states that, in this art, proprietary protocols  
4 were the norm until recently (i.e., at the time the application was filed) and that use of  
5 nonproprietary protocols is increasing. A person of ordinary skill in the art at the time  
6 the invention was made would have known what the applicants admitted at page 2 lines  
7 8-16. A person of ordinary skill in the art at the time the invention was made would  
8 therefore have reasonably inferred, based on the state of the art, that Rhodes, which  
9 was filed almost four years before this application, would use a proprietary protocol. It  
10 would therefore have been obvious to one of ordinary skill in the art at the time the  
11 invention was made to modify Rhodes to use a proprietary protocol as taught by Hite  
12 based on logical reasoning from the APA.

13 As to the limitations of the protocol including a message identification field for  
14 identifying a select message from said plurality of messages and a protocol  
15 identification field for identifying said select message as being transmitted via said  
16 proprietary protocol, Rhodes is silent as to the details of the protocol being used. Hite,  
17 on the other hand, teaches these features (Fig. 11 elems. 670 and 690). It would have  
18 been obvious to one of ordinary skill in the art at the time the invention was made to  
19 modify the protocol of Rhodes to use a protocol field identifying the protocol and a  
20 message field identifying a message as taught by Hite. This modification would have  
21 been obvious because identifying the protocol would allow multiple protocols to be

1 supported and identifying the message would allow multiple messages to be supported,  
2 thus making the system expandable.

3 As to the limitation of the plurality of messages include a discover message  
4 transmitted from the application to the application controller to determine whether the  
5 select system point is stored in a database of the application controller, Hite teaches a  
6 discover message as claimed (Col. 33 lines 11-24). It would have been obvious to one  
7 of ordinary skill in the art at the time the invention was made combine Hite's teaching  
8 regarding retrieving a list of online devices with the system of Rhodes by having the  
9 applications query the control node to determine which controlled devices are actually  
10 online. This combination would have been obvious because it would allow the system  
11 of Rhodes to determine which devices are online (Hite col. 33 lines 11-24).

12  
13 ***Response to Arguments***

14 Regarding the objection to the drawings under 37 CFR 1.83(a), it has been  
15 withdrawn in view of the applicants' remarks in the response filed on 10/27/06.

16 Regarding the objection to the drawings under 37 CFR 1.78(o), it has been  
17 withdrawn in view of the replacement sheets submitted by the applicants in the  
18 response filed on 10/27/06.

19 Regarding the objection to the specification under 37 CFR 1.75(d)(1), it has been  
20 withdrawn in view of the applicants' remarks in the response filed on 10/27/06.

1       Regarding the objection to the summary of the invention under 37 CFR 1.73, it  
2       has been withdrawn in view of the applicants' amendment to the specification filed on  
3       10/27/06.

4       Regarding the objection to the specification under 37 CFR 1.52(b)(2)(iii), it has  
5       been withdrawn in view of the applicants' remarks in the response filed on 10/27/06.

6       Regarding the objection to the specification under 37 CFR 1.52(a)(1)(v), the  
7       applicants' arguments have been considered but are not deemed persuasive. The  
8       applicants appear to argue that this objection should be withdrawn because the  
9       objection was not raised before. While it is regrettable that the objection was not made  
10      before, the time at which the objection is raised is alone not sufficient to justify a waiver  
11      of the rule. The applicants also argue that there is no proof that the text at issue is not  
12      capable of optical character recognition. The examiner sees no reason why actual  
13      proof should be required since it is generally known that shading inherently makes the  
14      process of optical character recognition more difficult. However, assuming without  
15      conceding that proof is required, the examiner attempted to OCR the text at issue and  
16      found that it was not recognized by USPTO OCR software that is part of the Image File  
17      Wrapper system. Accordingly, the objection is maintained. The applicants are  
18      reminded that they may request, under 37 CFR 1.111, that the objection may be held in  
19      abeyance until allowable subject matter is indicated.

20      Regarding the rejection to the claims under 35 U.S.C. 101, it has been withdrawn  
21      in view of the applicants' amendment to the claims on 10/27/06.

Art Unit: 2142

1           Regarding the rejection of claims 1-13, 15-39, and 47-53 under 35 U.S.C. 112  
2 first paragraph, the applicants' arguments have been considered but are not deemed  
3 persuasive. The applicants appear to be arguing that since the art is predictable, only a  
4 single working example must be provided in order to enable the entire scope of the  
5 claim. While this may be true in some circumstances, the consideration of whether the  
6 entire scope of the claims is enabled is fact specific. In this case, the applicants have  
7 ignored the evidence in the record regarding the substantial and fundamental  
8 differences between the LonTalk® and BACnet protocols. See the reasons for rejection  
9 given above. In a case such as this, where two protocols significantly differ, the  
10 applicants were obliged to provide more guidance in their application as originally filed  
11 as to how one of ordinary skill in the art would make and use the invention using both  
12 protocols. In addition, the applicants argue that incorporation of the present invention in  
13 a predictable data transmission protocol would be within the skill of one of ordinary skill  
14 in the art. This argument is not persuasive because it is unsupported by any evidence.

15           Regarding the rejection of claims 1-5,8,10-13,15-16, 18-22, 25, 27-34, 36-39,  
16 and 47-51 under 35 U.S.C. 102(e) as being anticipated by Hite, the applicants'  
17 arguments filed on 10/27/06 have been considered but are not deemed persuasive.  
18 The applicants argued that (a) Hite cannot anticipate the claimed invention because it  
19 does not teach applications and an application controller that communicate using a  
20 proprietary protocol; and (b) Hite cannot anticipate the claimed invention because it  
21 does not teach a discover message that inquires as to whether an element  
22 corresponding to a system point is stored in a database of an application controller.

1           As to point (a), this argument, although not specifically stated, appears on page  
2 22 of the remarks filed on 10/27/06 where the applicants point out that Hite's IA server  
3 translates between a web based protocol and a proprietary control network protocol.  
4 While HTTP itself is not a proprietary protocol, the applicants' characterization of Hite  
5 ignores the fact that the protocol conversion is invoked by calls to a CGI or ASP handler  
6 on the IA server (Fig. 4). When invoking a CGI, an HTTP request will have particular  
7 parameter information associated with the request (col. 4 lines 20-38). Those  
8 parameters are specific to the particular processes implemented on the IA server. Not  
9 all web servers would recognize what to do with a request containing those parameters.  
10 Accordingly, Hite discloses a system in which proprietary information (i.e., information  
11 specific to Hite's application and not generic to all web applications) is transmitted to the  
12 IA server. The examiner would point out to the applicants the similarity between this  
13 insertion of application specific information into a HTTP request and the applicants'  
14 insertion of SP protocol information into the "explicit messages" fields of a LONTalk®  
15 message. See specification p. 8 lines 11-16.

16           As to point (b), this argument has been considered but is not deemed  
17 persuasive. When a browser in Hite's system access a control area network through a  
18 control network portal in order to monitor devices on the control area network, the  
19 browser could send a message that would subsequently be translated into a command  
20 message on the control area network. This message can discover specific information  
21 about a specific operating parameter of a device on a control area network, such as the  
22 current ambient temperature measured by a thermostat. The various parameters

1 stored in the control area network devices is a distributed database of information. If  
2 the browser requests information about a particular device that is not on the network,  
3 Hite's system would generate an error message in response to that request. See Hite  
4 Table A indicating Error as a potential response. Since the system would returns valid  
5 device information when the device is present and error messages if a device is not, the  
6 query from the browser would "discover" whether a whether an element corresponding  
7 to a system point is stored in a database, albeit a distributed database, of an application  
8 controller.

9       Regarding the rejection of claim 3 under 35 U.S.C. 102(e) as being anticipated  
10 by Hite, the applicants' arguments filed on 10/27/06 have been considered but are not  
11 deemed persuasive. The applicants argued that (a) Hite does not teach a protocol  
12 including a system point identification field for identifying a select system point because  
13 (a) a system point corresponds to a variable and a variable is something that changes;  
14 (b) a URL only accesses a web page and cannot identify a system point; and (c) a URL  
15 cannot be part of a proprietary protocol.

16       As to point (a), this argument is not deemed persuasive in view of Hite's  
17 disclosure at col. 3 lines 33-49 that users can monitor things such as current ambient  
18 temperature which is inherently a changing value.

19       As to point (b), this argument is not persuasive since Hite teaches that the web  
20 pages returned to the user contains information about a variable such as current  
21 ambient temperature (col. 3 lines 33-49; col. 4 39-52). Clearly Hite's user is able to  
22 specify particular information that is desired base on the fact that the user's request

1 would ultimately be translated into a message on the control area network that is used  
2 to obtain specific information from a device, such as current ambient temperature.

3 As to point (c), this argument was addressed above where it was explained how  
4 Hite cannot anticipate teaches applications and an application controller that  
5 communicate using a proprietary protocol.

6 Regarding the rejection of claim 11 under 35 U.S.C. 102(e) as being anticipated  
7 by Hite, the applicants' argued on 10/27/06 that Hite does not teach a message field for  
8 determining a format for displaying the element values of a select system point. The  
9 persuasiveness of this argument needs to be considered in the context of what the  
10 applicants disclose in their specification as field for determining a format for displaying  
11 element values. In their specification, the applicants a format field that indicates  
12 whether character stings containing the values of elements include formatting  
13 information such as the element's units. See specification p. 11 lines 1-10. In view of  
14 the remainder of the specification, a message including a measurement such as  
15 temperature within a character string can also contain the characters that indicate units  
16 of temperature such as F for fahrenheit or C for centigrade. Hite, however, teaches a  
17 text based protocol for retrieving parameters such as the current ambient temperature  
18 measured by a thermostat. The temperature would be communicated from the  
19 thermostat to the master controller via a string of characters. See description of "string"  
20 messages in column 22. When a parameter such as a temperature, which in the  
21 context of home thermostats, can be measured in a either centigrade or Fahrenheit, a



Art Unit: 2142

1 Any inquiry concerning this communication or earlier communications from the  
2 examiner should be directed to Andrew Caldwell, whose telephone number is (571)  
3 272-3868. The examiner can normally be reached on M-Th from 9:00 a.m. to 5:30 p.m.  
4 EST.

5  
6 The fax number for Group 2100 is as follows:

7  
8 Fax Responses: 571-273-8300  
9

10 Any general inquiry relating to the status of this application can be answered  
11 using Patent Application Information Retrieval (PAIR) system, which is available at the  
12 USPTO web site. Any questions on using the PAIR system should be directed to the  
13 Patent Electronic Business Center toll free at (866) 217-9197.

14  
15 

16  
17 Andrew Caldwell  
18 Supervisory Patent Examiner  
19 571-272-3868  
20 July 18, 2005

21

22